

## REGION 10 OWW TOPIC BRIEFING

### TRIBAL CONSULTATION AND REVIEW UPDATE FOR DESCHUTES TOTAL MAXIMUM DAILY LOAD (TMDL), THURSTON & LEWIS COUNTIES, WASHINGTON

#### Meeting Purpose

Provide background information and update Dan on the following:

- Status of EPA TMDL Review;
- Squaxin Island Tribe TMDL Concerns; and
- Options for Moving Forward

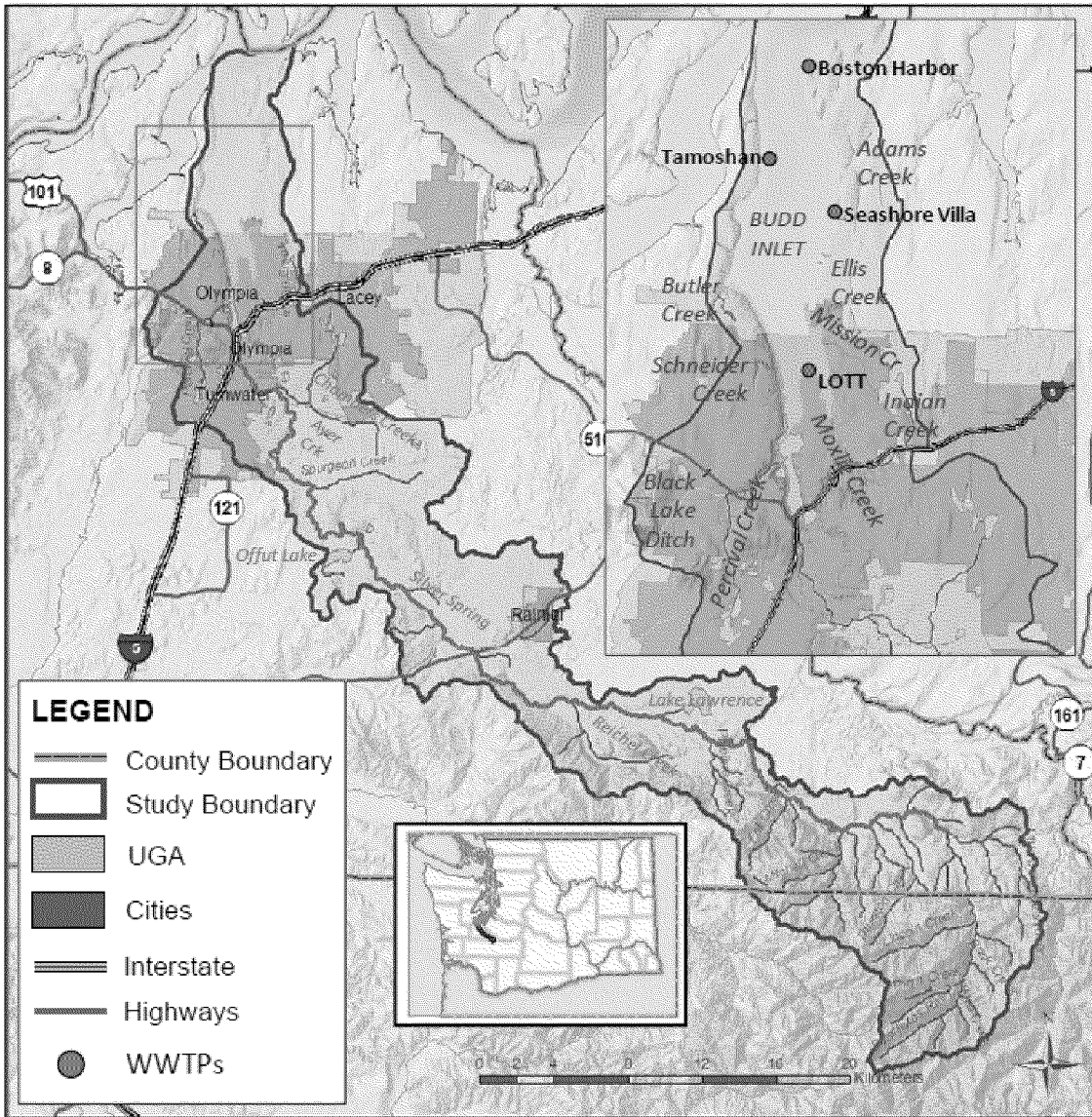
#### Project Background

The Deschutes River, Percival Creek, and Budd Inlet Tributaries (Phase 1) TMDL study area (186 mi<sup>2</sup>) is located in south Puget Sound and is situated within the boundaries of Thurston and Lewis Counties, Washington (**Figure 1**). The study area includes the major cities or towns of Olympia, Lacey, Tumwater, and Rainier. Significant data collection to support the Phase 1 TMDL began in 2003. Data analysis and modeling concluded in 2012. On December 17, 2015, Ecology submitted the final Phase 1 TMDL to EPA for approval. The submitted TMDL package includes a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment). EPA understands that Ecology is developing a TMDL for Budd Inlet and Capitol Lake as Phase 2 of the Deschutes TMDL. According to the timeline shared with EPA in March 2016, Ecology is tentatively planning to submit the Phase 2 TMDL for approval in June 2019.

The Squaxin Island Tribe (SIT) has maintained throughout the TMDL development and public notice process that critical aquatic improvement measures (see *Squaxin Island Tribe TMDL Concerns*) are missing from the TMDL. EPA met with SIT in 2015 to discuss these concerns. In addition to concerns

### Ex. 5 - Deliberative Process

Phase 1 TMDL unfolded, NWEA filed a complaint in 2014 regarding Ecology's use of Natural Condition Criteria (NCC). Should NCC provisions be rescinded, parts of the Phase 1 TMDL may be invalidated because the TMDL considered or applied targets (temperature, DO, and pH) that were based on system potential (~modeled interpretation of highest quality condition attainable).



**Figure 1.** Study Area for Deschutes TMDLs (from Roberts et al., 2012, page 6).

### Quick Summary

- ✓ Ecology is seeking approval for TMDLs that span 71 segments
- ✓ Category 5 impairments: water temperature, DO, pH, fecal coliform bacteria, and fine sediment
- ✓ Category 4C pollution: in-stream flows and large woody debris
- ✓ TMDL split into two phases given technical complexity and political ramifications related to Capitol Lake and Budd Inlet impairments. Complexities include Capitol Lake as a source of low DO to South Sound and nutrient reductions from stormwater sources to address Capitol Lake phosphorus impairment

- ✓ Surrogates are proposed for 4 of 5 pollutants
- ✓ The TMDL seeks to achieve temperature, DO, and pH water quality standards through increased stream shading (primarily)
- ✓ Ecology predicts that WQS for temperature, DO, and pH will be achieved by 2065.
- ✓ Permittees include: 5 municipal stormwater-MS4s, 7 sand & gravel, 9 industrial stormwater, and 25+ construction stormwater. The boundary of the Phase 1 TMDL does not include wastewater treatment point sources. Phase 2 of the TMDL will include the LOTT regional wastewater facility that serves south Puget Sound.

## **Ex. 5 - Deliberative Process**

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## Squaxin Island Tribe Concerns

SIT has maintained throughout the TMDL development and public notice process that the Phase 1 TMDL should address habitat (lack of woody debris, reduced stream flows). In addition, long implementation timelines in combination with decreasing habitat have prompted SIT to question if the TMDL provides reasonable assurance. In an email dated 6/10/2016, Erica Marbet (SIT Technical Representative) requested the following agenda items be including during our consultation meeting scheduled for June 30<sup>th</sup>, 2016:

### “ River Flow

- Decreasing flows of the Deschutes River
- River flow in the Ecology’s Deschutes River temperature modeling

## Ex. 5 - Deliberative Process

- Actions to be taken.

### Riparian Shade

## Ex. 5 - Deliberative Process

- Scale of the Deschutes River (flow, channel, and valley) relative to a 75 ft riparian buffer.
- Large woody debris as target allocations.
- Actions to be taken.

Addressing river flow is even more crucial, given that likelihood of full riparian shade restoration is low, and the timeframe is very long. “

## Ex. 5 - Deliberative Process

**Table 1.** Critical Low Flows Calculated for the Deschutes River (from Roberts et al., 2012)

Years	Period	Rainier (12079000)		Years	E Street (12080010)	
		(cfs)	(cms)		(cfs)	(cms)
1949 – 2001	All data	24.0	0.68	1946 - 2002	64.1	1.8
1949 – 1969	Historical only	26.0	0.74	1945-1964	78.3	2.2
1991 – 2001	Recent only	21.4	0.61	1991-2001	56.3	1.6

In addition, SIT included the following in their public notice comments:

“The Clean Water Act does not allow Ecology to draw a bright line between its water quality and quantity programs. Rather, the Act requires “comprehensive solutions” to prevent, reduce and eliminate pollution in concert with programs for managing water; and (2) establishes the supreme goal of restoring and maintaining the chemical, physical, and biological integrity of the Nation’s waters. Drawing a bright line is a prohibited “artificial distinction.” PUD No. 1 v. Ecology, 511 U.S. 700, 719 (1994).”

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